



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.                            | FILING DATE      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.      | CONFIRMATION NO |
|--|------------------|----------------------|--------------------------|-----------------|
| 09/451,870                                 | 12/01/1999       | MASAMICHI ITO        | 862.3155                 | 9611            |
| 5514 75                                    | 90 06/29/2005    |                      | EXAM                     | INER            |
|  | K CELLA HARPER & | MA, JOHNNY           |                          |                 |
| 30 ROCKEFELLER PLAZA<br>NEW YORK, NY 10112 |                  |                      | ART UNIT                 | PAPER NUMBER    |
| •  |                  |                      | 2617                     |                 |
|  |                  |                      | DATE MAIL ED: 06/20/2004 | -               |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.  | Applicant(s)   |  |  |  |  |
|---|--|--|--|--|--|--|
|   | 09/451,870   | ITO ET AL.   |  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit   |  |  |  |  |
|   | Johnny Ma  | 2617   |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply   |  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply 1 If NO period for reply is specified above, the maximum statutory period v  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONEI | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |
| Status  |  |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 12 April 2005.   |  |  |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This  |  |  |  |  |  |  |
| ,—  |  |  |  |  |  |  |
| Disposition of Claims   | •  |  |  |  |  |  |
| 4) ☐ Claim(s) 1-14,16-19 and 21-96 is/are pending 4a) Of the above claim(s) 1-11 and 23-96 is/are 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 12-14,16-19,21 and 22 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o   | e withdrawn from consideration.  |  |  |  |  |  |
| Application Papers  |  |  |  |  |  |  |
| 9) The specification is objected to by the Examiner.  |  |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  |  |  |  |  |  |  |
| Applicant may not request that any objection to the   |  |  |  |  |  |  |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex   |  | • •  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list  | s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).   | on No ed in this National Stage  |  |  |  |  |
| Attachment(s)   |  |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)   | 4) Interview Summary<br>Paper No(s)/Mail Da  |  |  |  |  |  |
| <ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/>Paper No(s)/Mail Date <u>5/26/05</u>.</li> </ol>   |  | atent Application (PTO-152)  |  |  |  |  |

### **DETAILED ACTION**

## Response to Arguments

1. Applicant's arguments with respect to claims 12-14, 16-19, 21, and 22 have been considered but are most in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 12-14, 16-19, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (US 6,567,427 B1) in further view of Rajan (US 2001/0000962 A1) and Deniau et al. (US 2001/0052856 A1).

As to claim 12, note the Suzuki et al. reference discloses an image signal multiplexing apparatus and methods, image signal demultiplexing apparatus and methods, and transmission media. The claimed "a receiver, arranged to receive a bitstream" is met by user terminal (Suzuki 14:40-46) that receives a multiplexed bitstream (Suzuki 15:46-51). The claimed "wherein the bit stream is multiplexed image data encoded by MPEG 4, image data and/or sound data encoded by another coding format" is met by the disclosed multiplexed bitstream FS (Suzuki 14:16-20) noting "the MPEG4 scheme is employed for an encoding and decoding scheme" (Suzuki 13:63-67) and "[e]ach of the decoders 207-1 to 207-n decodes an associated bitstream based on a predetermined decoding method corresponding to the encoding, and outputs a video or audio signal to the reconstruction circuit 209 (column 16, lines 21-24), the format of the bitstream may

be MPEG2 video or the like (column 20, lines 43-50). Thus the Suzuki et al. reference discloses a multiplexed bit stream comprising MPEG 4 and MPEG 2 bit streams, wherein it is inherent that such data be received for decoding. The claimed "a first decoder, arranged to decode the image data encoded by MPEG 4" is met by demultiplexer circuit 205, syntax analysis circuit 206/208 and decoders as illustrated in Figure 1, wherein description is made assuming the MPEG4 scheme is employed for an encoding and decoding scheme (column 13, lines 62-67). The claimed "a second decoder, arranged to decode the image data and/or sound data encoded by the other coding scheme" is met by "[e]ach of the decoders 207-1 to 207-n decodes an associated bitstream based on a predetermined decoding method corresponding to the encoding, and outputs a video or audio signal to the reconstruction circuit 209 (column 16, lines 21-24) and "[t]he syntax analysis circuit 206 identifies the type and the number of required decoders to supply required decoders 207-1 to 207-n with the respective bitstreams ES1-Esn (column 16, lines 3-6) wherein the format of the bitstream may be MPEG2 video or the like (column 20, lines 43-50). The claimed "a receiver, arranged to receive image data encoded by MPEG 4, and image data and/or sound data encoded by another coding format" is met by the decoding of MPEG 4 and MPEG-2 data as discussed above. However, the Suzuki et al. reference does not specifically disclose the use of system data (additional data as defined in Applicant's specification). Now note the Rajan reference that discloses the claimed "system data" wherein "[t]he coded elementary content streams (comprising video, audio, graphics, text [system data], etc.) are routed to their respective decoders according to the information contained in the received descriptors" (Rajan [0051]). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Suzuki et al. A/V

bit streams with the Rajan bit streams including system data for the purpose of providing an enriched presentation to the user wherein messages and text may also be displayed to a system user. Further note, that the Suzuki et al. and Rajan combination discloses a multiplexed bit stream including system data and a corresponding decoder, as discussed above. However, the Suzuki et al. and Rajan reference does not specifically teach a character generator. Now note the Deniau et al. reference that discloses a receiver in a cyclic packet data transmission system. The claimed "a character generator, arranged to generate character data" is met by the disclosed character generator for generating a video signal for display (Deniau [0042]). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Suzuki et al. and Rajan combination teaching the use of system data and a corresponding decoder with the Deniau et al. character generator for the purpose of providing a means for displaying the system data while conserving the use of bandwidth, i.e. alleviating the need to transfer the full image of the text. The claimed "for display in accordance with the received system data" is met by the Suzuki et al., Rajan, and Deniau et al. combination as discussed above wherein the character data is generated according to the received system data bitstream. However, the Suzuki reference is silent as to the use of a setter. The Rajan reference discloses a terminal for composing and presenting MPEG-4 video programs wherein "...the scene description information is coded into a binary format known as BIFS (Binary Format for Scene). This BIFS data is packetized and multiplexed at a transmission site, such as a cable and or satellite television headend, or a server in a computer network, before being sent over a communication channel to a terminal 100" (Rajan [0042]). The claimed "setter, arranged to set a layout of images represented by a plurality of image data, which are

decoded by said first and second decoders, and the generated character data" is met by "[t]he terminal manager 110 passes the user input events to the composition engine 120 for appropriate handling. For example, a user may enter commands to reposition or change the attributes of certain objects within the scene graph" (Rajan [0068]) wherein the composition engine maintains and updates a scene graph of the current objects for display (Rajan [0078]) including a scene graph for reproduction of objects for display (Rajan [0078]). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify (if necessary) the Suzuki et al. MPEG 4 presentation with the Rajan setter for the purpose of allowing a user to customize display of programming and user interactivity with such programming wherein the MPEG-4 communication standard allows a user to interact with video and audio objects within a scene, whether they are from conventional sources, such as moving video, or from synthetic (computer generated) sources (Rajan [0004]). The claimed "in accordance with the coding formats of the received image and/or sound data" is met by the Suzuki and Rajan combination wherein objects may be encoded in various formats requiring different decoding means as set forth above. The claimed "a synthesizer, arranged to synthesize the plurality of image data and/or sound data decoded by said first and second decoders and the generated character data, in accordance with the layout" is met by the Suzuki et al., Rajan, and Deniau et al. combination as discussed above wherein "reconstruction circuit 209 includes a synthesizer circuit 252 such that an image signal produced by the synthesizer circuit 252 is supplied to a display 251 for display (column 16, lines 42-50) wherein elementary streams comprise encoded audio and video streams (column 13, lines 56-59) and the Suzuki et al., Rajan,

and Deniau et al. combination as discussed above wherein bit streams include audio, video, and system data, synthesized in accordance with user specified layouts.

As to claim 13, the claimed "wherein said second decoder decodes image data and/or sound data encoded by MPEG 2," please see rejection of claim1 wherein the format of the bitstream may be MPEG2 video or the like (column 20, lines 43-50).

As to claim 14, the claimed "further comprising a reproducer arranged to reproduce the image data and/or sound data synthesized by said synthesizer" is met by "reconstruction circuit 209 includes a synthesizer circuit 252 such that an image signal produced by the synthesizer circuit 252 is supplied to a display 251 for display (column 16, lines 42-50) wherein elementary streams comprise encoded audio and video streams (column 13, lines 56-59).

As to claim 16, the claimed "further comprising a memory for storing the layout set by said setter" is met by that discussed in the rejection of claim 12 wherein user modifies a scene graph that is maintained on a terminal for presentation of programming, the storing in memory of such information is inherent to the maintaining of the scene graph for composition purposes. The claimed "in correspondence with information related to a broadcast program received by said receiver" is also met by that discussed in the rejection of claim 12 wherein the stored scene graph information corresponds to broadcasted video programming as evidenced by program transmission from a cable and or satellite television headend (Rajan [0042]).

As to claims 17-19 and 21, please see the rejections of claims 12-14 and 16 respectively.

As to claim 22, please see rejection of claim 12. Also note the Suzuki et al. reference discloses an image signal multiplexing apparatus and methods, image signal demultiplexing

apparatus and methods, and transmission media wherein the disclosed processing may be implemented in software or hardware (column 22, lines 15-24).

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnny Ma whose telephone number is (571) 272-7351. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

im

VIVEK SRIVASTAVA PRIMARY EXAMINER

Page 7